**Macromolecules Review Activity**

|  |  |
| --- | --- |
| 1. What type of macromolecule is this? How do you know? Also, what is a more specific name for this molecule? Is this a monomer, dimer, or polymer?  http://ww1.prweb.com/prfiles/2011/12/01/9006172/adenine-nucleotide.jpg | 2. Enzymes (molecules that speed up chemical reactions) are an example of this type of macromolecule… |
| 3. What type of macromolecule is used for short term energy and for structure in plant cell walls? | 4. What type of macromolecule contains the elements carbon, hydrogen, oxygen, nitrogen, and phosphorus? |
| 5. What type of macromolecule is this? How do you know? Also, what is a more specific name for this molecule? Is this a monomer, dimer, or polymer?  http://www.chemeddl.org/resources/models360/files/107526/d-glucose-beta%20Haworth.png | 6. What type of macromolecule typically contains glycerol and fatty acid chains? (Some people consider these components to be monomers of this macromolecule, and some people do not.) |
| 7. What type of macromolecule is made up of monomers called amino acids? | 8. What type of macromolecule has polymers called polysaccharides? |
| 9. What type of macromolecule is used for long-term energy storage, for insulation (i.e. to stay warm), and is found in cell membranes? | 10. Which of the four macromolecules are considered organic compounds? What does this mean? |
| 11. What type of macromolecule are these? How do you know? Also, what is a more specific name for these molecules? Are these molecules monomers, dimers, or polymers? | 12. What type of macromolecule is this? How do you know? Is this a monomer, dimer, or polymer? |
| 13. What type of macromolecule is used for defense, structure, speeding up reactions, transport, movement, etc.? | 14. What type of macromolecule contains the elements carbon, hydrogen, and oxygen always found in a 1C : 2H : 1O ratio? |
| 15. What macromolecule has polymers called polypeptides? | 16. What type of macromolecule is this? How do you know? Also, what is a more specific name for this molecule? Is this a monomer, dimer, or polymer? |
| 17. What macromolecule has monomers whose names typically end in “-ose?” | 18. Which of the four macromolecules are created using dehydration synthesis? Describe this process. |
| 19. What type of macromolecule is this? How do you know? Also, what is a more specific name for this molecule? Is this a monomer, dimer, or polymer?  http://web.visionlearning.com/custom/chemistry/custom/images/starch_yellow2.gif | 20. What type of macromolecule is this? How do you know? Also, what is a more specific name for this molecule? Is this a monomer, dimer, or polymer? |
| 21. Which of the four macromolecules are broken apart using hydrolysis? Describe this process. | 22. What type of macromolecule is this? How do you know? Also, what is a more specific name for this molecule? Is this a monomer, dimer, or polymer?  http://www.geneticliteracyproject.org/wp/wp-content/uploads/2012/09/blue-DNA.jpg |
| 23. What type of macromolecule contains mostly carbon and hydrogen atoms with a few oxygen atoms? | 24. What type of macromolecule is this? How do you know? Also, what is a more specific name for this molecule? Is this a monomer, dimer, or polymer?  http://www.worldofmolecules.com/foods/Sucrose.png |
| 25. What macromolecule has monomers called nucleotides? | 26. What type of macromolecule contains the elements carbon, hydrogen, oxygen, nitrogen, and sulfur? |
| 27. What type of macromolecule has polymers that include starch, cellulose, and glycogen? | 28. What type of macromolecule is used to store and transmit (i.e. send) genetic information? |
| 29. Label the following parts of the nucleotide pictured below: 5-carbon sugar, phosphate group, and nitrogen base. | 30. What type of macromolecule has polymers that include fats, oils, and waxes? |
| 31. Label the following parts of the amino acid pictured below: central carbon atom, hydrogen atom, amino group, carboxyl group, R group  amino acid | 32. What type of macromolecule has monomers called monosaccharides? |
| 33. What type of macromolecule has polymers that include DNA and RNA? | 34. Label the following parts of the fat molecule (aka triglyceride) pictured below: glycerol and fatty acids  http://biology.unm.edu/ccouncil/Biology_124/Images/triglyceride.bmp |
| 35. What type of macromolecule is shown below? | 36. What type of macromolecule has monomers that include glucose and fructose? |
| 37. What type of macromolecule has dimers that include sucrose? |  |